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ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY WAS--ETC F/G 13/6  
JUMBO 5-T CBR-PROOF AMBULANCE (KOFFERAUFBAU 5T ABC-DICHT FUER G--ETC(U))  
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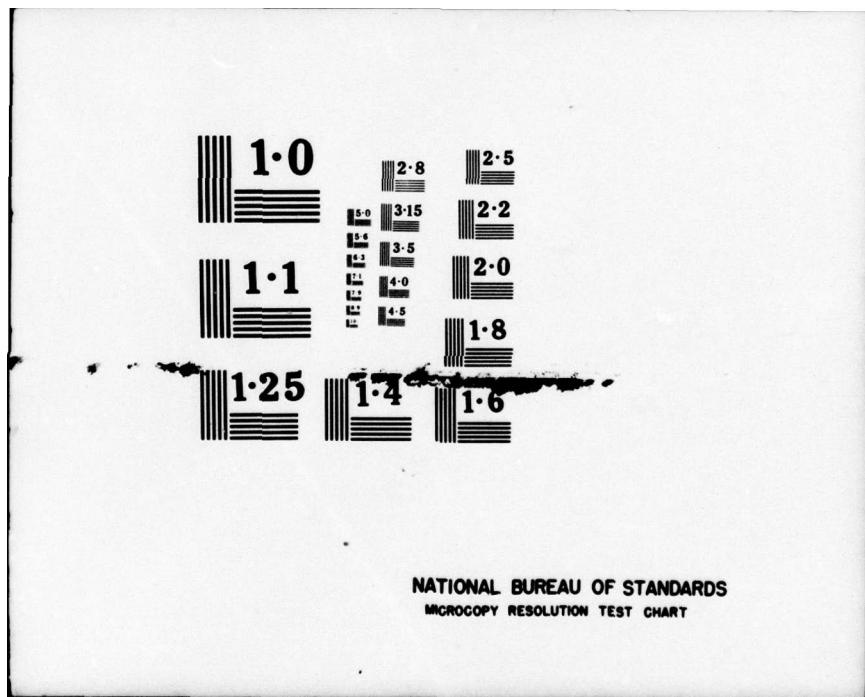
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DEPARTMENT OF THE ARMY  
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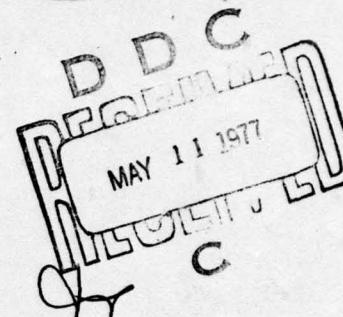
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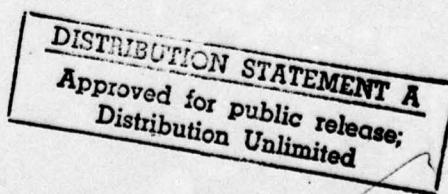
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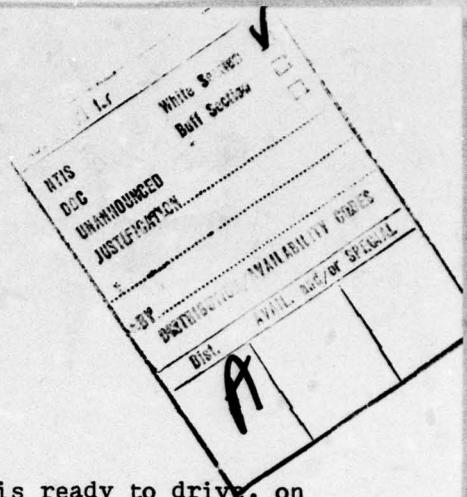
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## JUMBO 5-T CBR-PROOF AMBULANCE

Description, Operating Instructions, 1973 Edition

### Description of Equipment

#### General Remarks

The Jumbo ambulance based on a box body design is ready to drive, on a 5-t MAN [Augsburg-Nürnberg Machine Factory, Incorporated] chassis, 4 x 4 gl,\* type 630 I 2A, 5-3 KO [abbreviation unknown], with multi-fuel engine, special spring suspension, 7 tires 11.00-20, and trailer attachment, circular spring manufacture, type RU, size K 3 D.

#### Equipment

CBR protection ventilation system for 5-t ambulance from the firm of Drägerwerk Heinr. & Bernh. Dräger, Lübeck, and Anton Piller KG, Osterode/Harz.

Field stretcher suspensions for trucks by the firm of Binz, Lorch/Württ.

CBR-proof swing-fire heating plant from the firm of Eberspächer, Esslingen/Neckar; parts No 26 9095 00 00 00.

#### Purpose

The box-type superstructure is intended for the transport of casualties.

The following can be transported: 16 casualties sitting on benches or 8 casualties sitting and 6 stretcher cases or 4 casualties sitting and 8 stretcher cases or 12 stretcher cases.

Type: 5-t gl truck with CBR-proof body [\* gl = cross-country]

Supply No: 2310-12-145-3953

Production Documentation: Prepared according to blueprint set BW No 25 858

### Technical Data

Empty weight	9,100 kg
Payload	2,000 kg
Permissible total weight	13,000 kg
Inside dimensions	
Length	4,700 mm
Width	2,260
Height	1,840 mm
Protrusion over rear axle	1,650 mm

Dimensions, overall	Length	7,750 mm
	Width	2,450 mm
	Height	2,980 mm
	Length of body	4,800 mm
Height of door opening, rear wall door		1,738 mm
Width of door opening, side door		930 mm
Width of door opening, rear wall door		1,346 mm
Height of door opening, side door, bottom		1,037 mm
Height of door opening, side door, top		460 mm

Operating instructions are attached for the following:

- (a) CBR protective ventilation plant from the firm of Dräger/Piller;
- (b) Field stretcher retaining devices from the firm of Binz;
- (c) CBR-proof heating system from the firm of Eberspächer;
- (d) Chassis from MAN.

**PHOTO APPENDIX AND LEGEND**

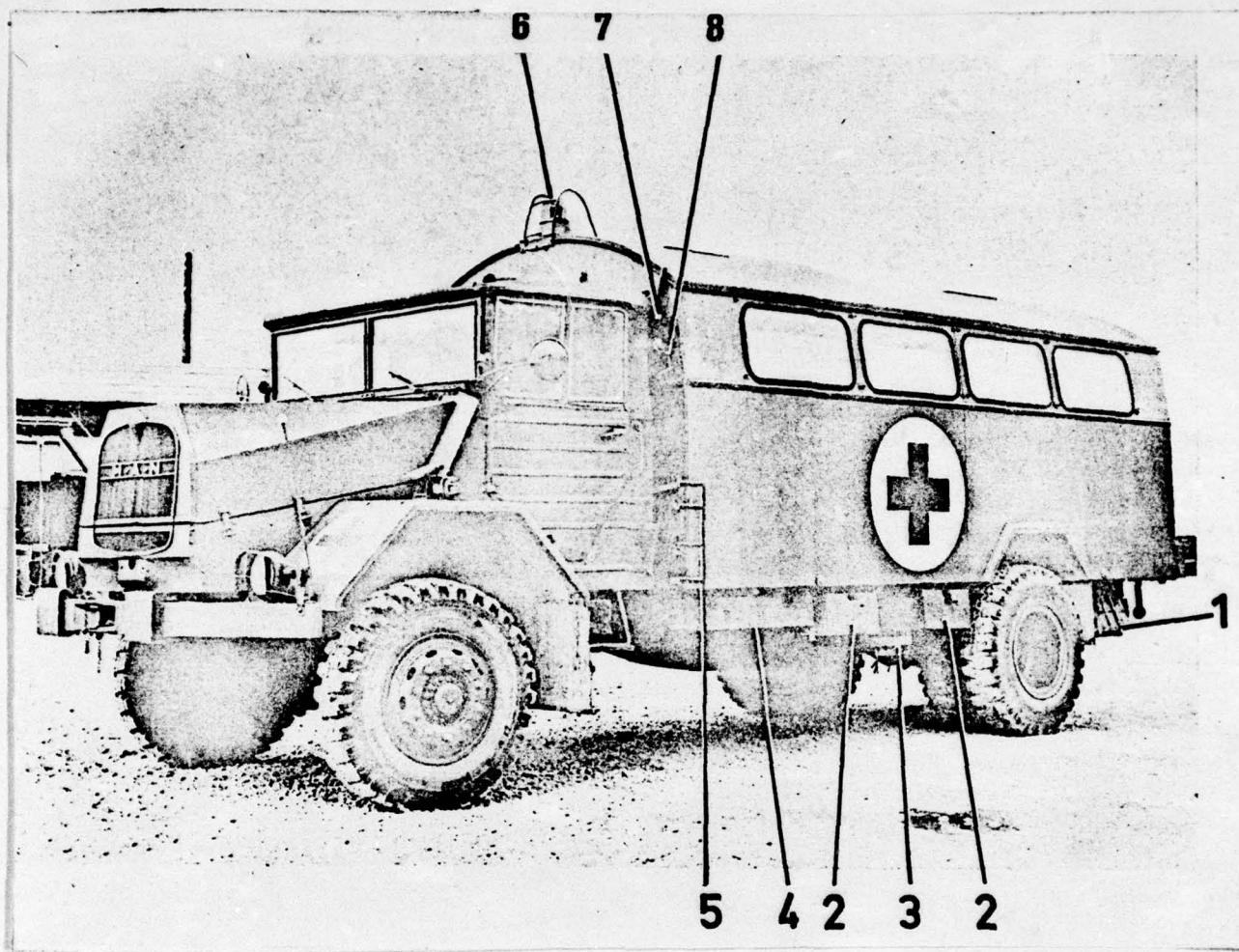


Figure 1. Left vehicle side with accessories.

1--Two adjustment wedges with bearings; 2--Storage box; 3--Four support spindles with retaining device; 4--Storage box for blackout curtains; 5--Retaining device for shovel, ax, and pickax; 6--All around identifying light, can be tilted forward; 7--Flag holder; 8--Plugs for 220 v.

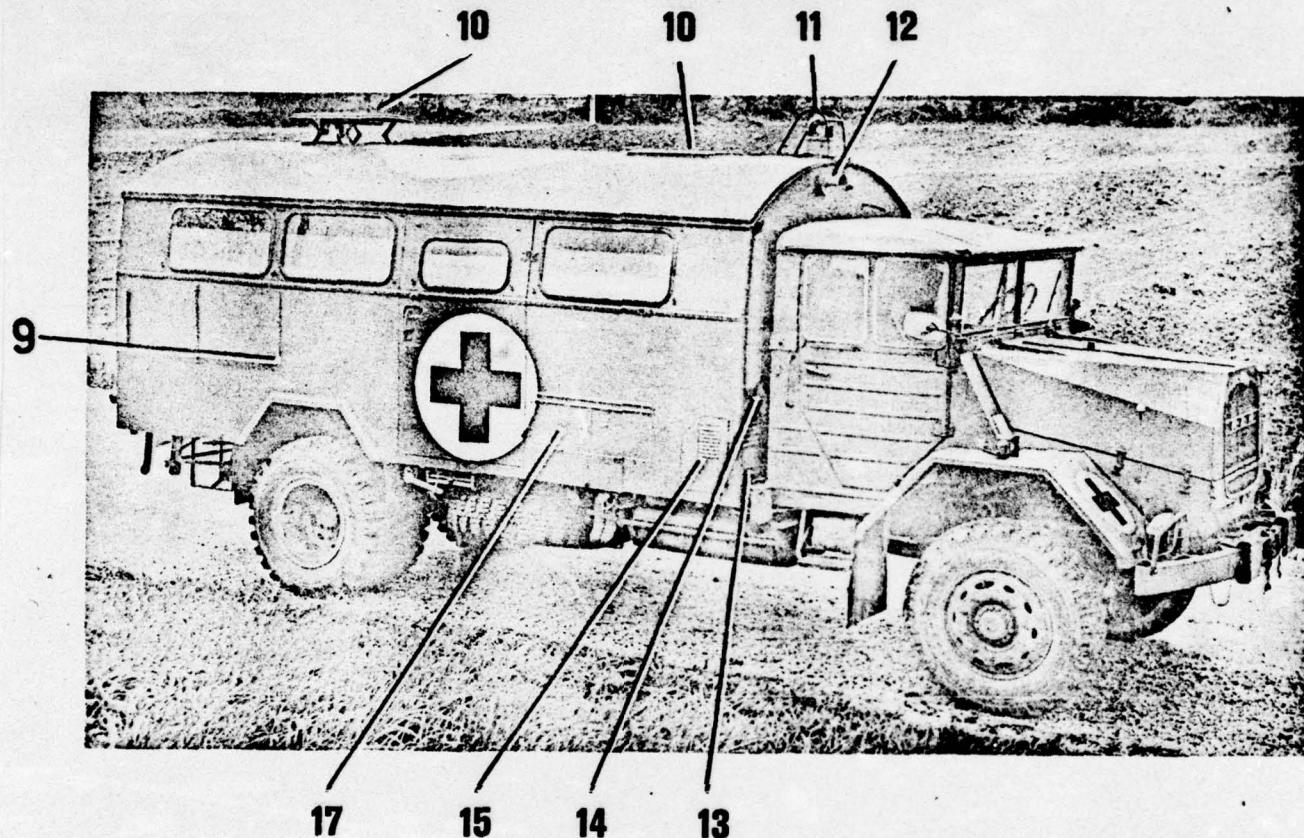


Figure 2. Right side of vehicle and roof with accessories.

9--Retaining device for rod parts (four parts); 10--Ventilation and air evacuation flaps; 11--Tree branch guard; 12--Red Cross identifying light; 13--Plaque with body number; 14--Exhaust gas pipe for heating; 15--Door for swing fire heating unit; [number 16 missing in original]; 17--Flap for CBR filter box.

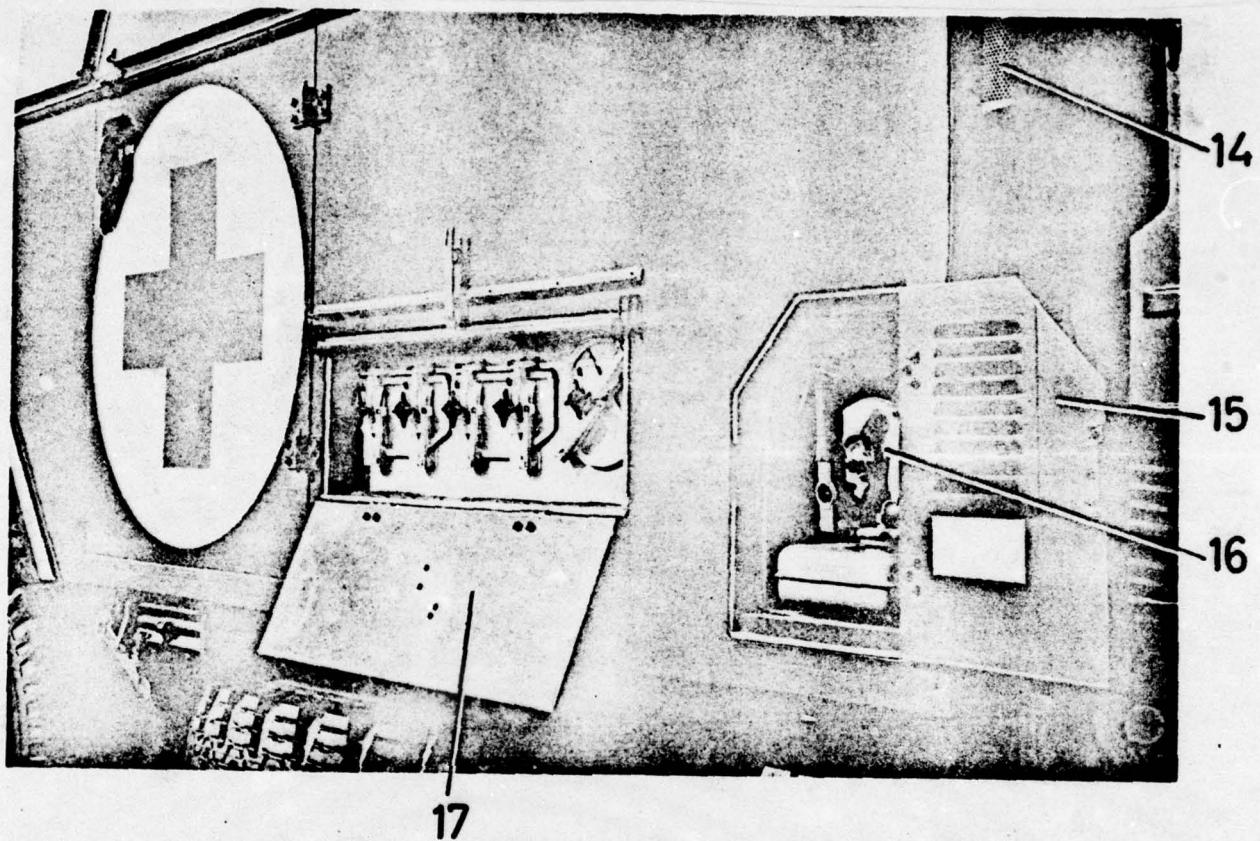


Figure 3. Section of right body side.  
14--Exhaust gas for heating unit; 15--Door for swing-fire heating unit;  
16--Swing-fire heating unit; 17--Flap for CBR filter box, opened.

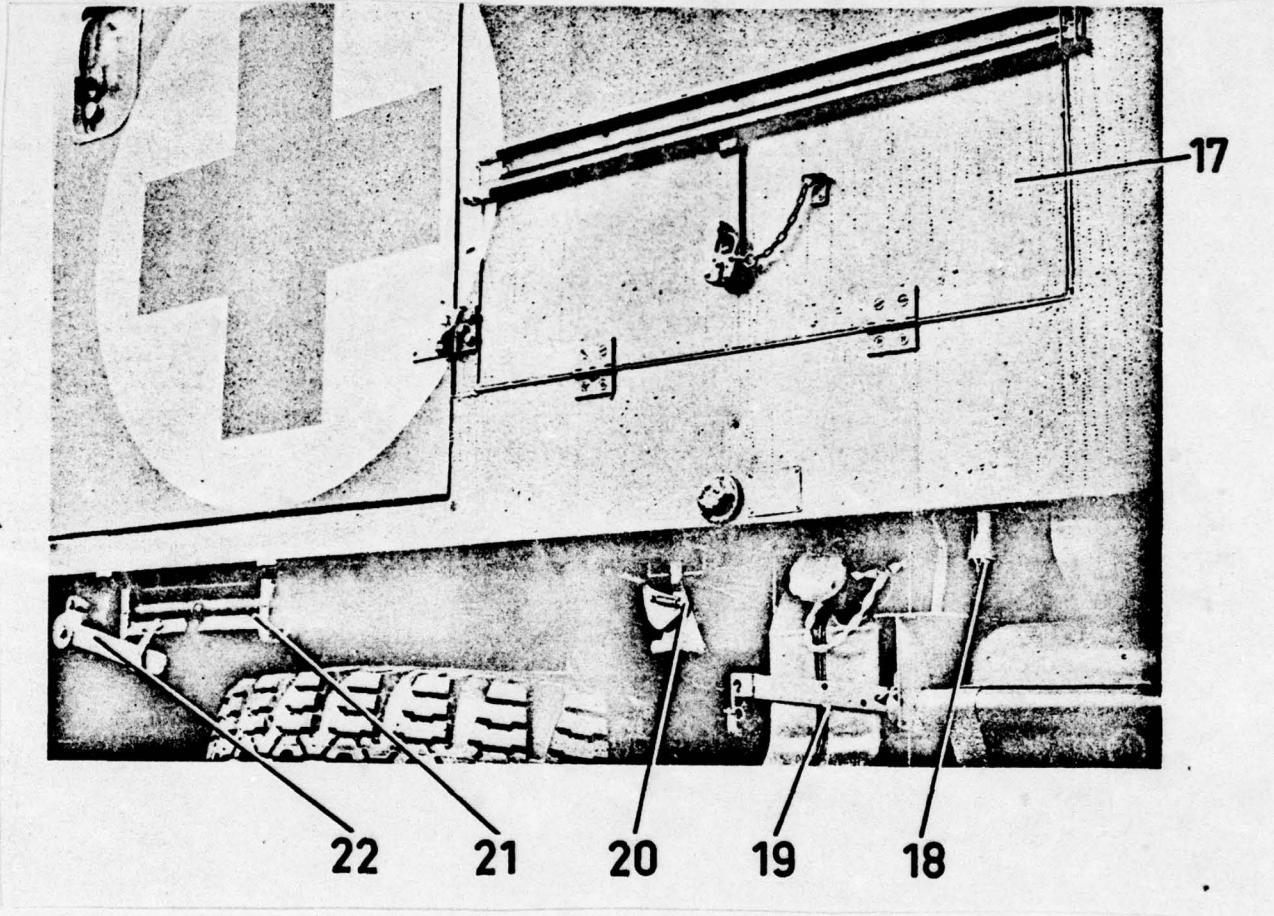


Figure 4. Portion of right body side.

17--Flap for CBR filter box, closed; 18--Filter for heating unit; 19--Canister with retaining device for heating; 20--Retaining device for truck winch; 21--Lateral folding step with retaining device; 22--Hand lever for spare tire elevator.

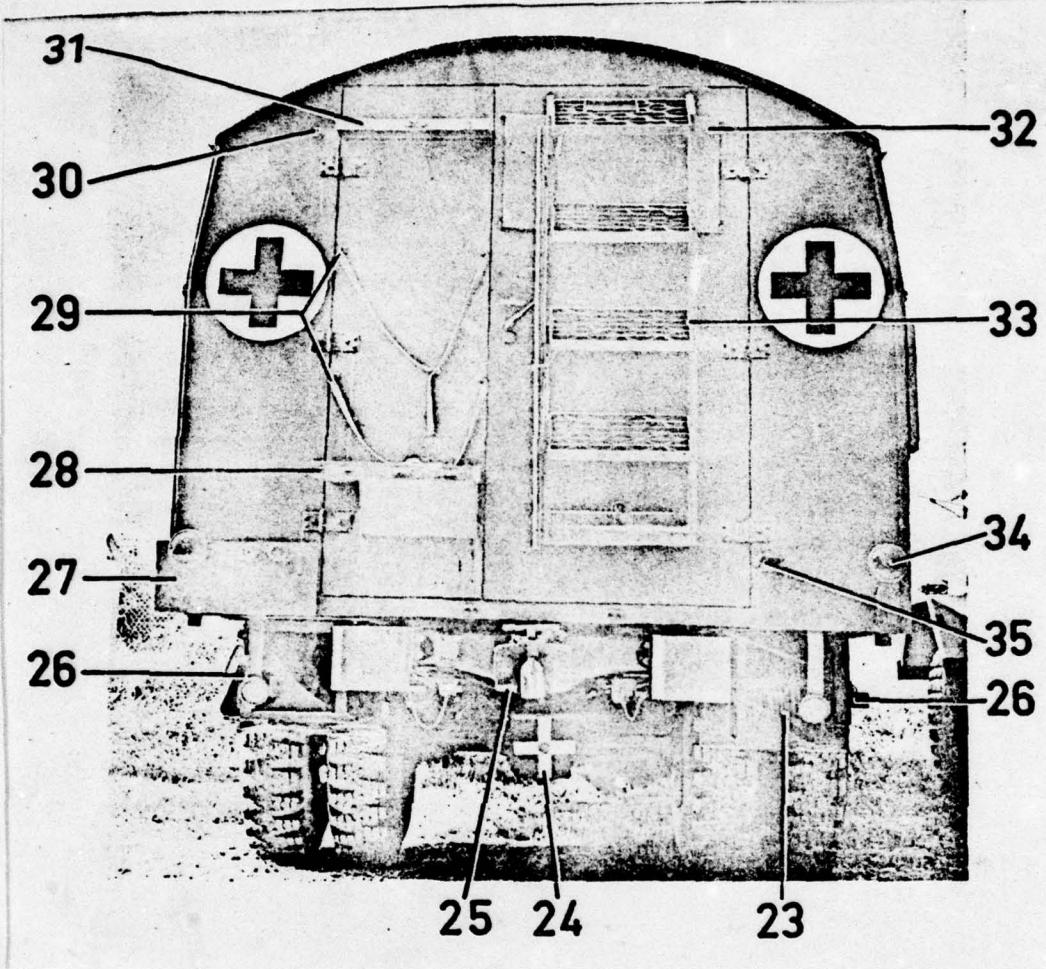


Figure 5. Rear wall of vehicle with accessories and attachment parts.  
23--Holder for double canister; 24--Guide cross light; 25--Trailer coupling;  
26--Retaining device for tow rod consisting of receiver and closing part;  
27--License plate holder with lights; 28--Retaining device for bumper bars,  
lower part; 29--Retaining belts for camouflage net bag; 30--Rubber shock absorber  
for doorstop; 31--Holder for bumper bars, upper part; 32--Blackout curtain;  
33--Stepladder with railing and retaining device; 34--Flashing tail light;  
35--Door stop.

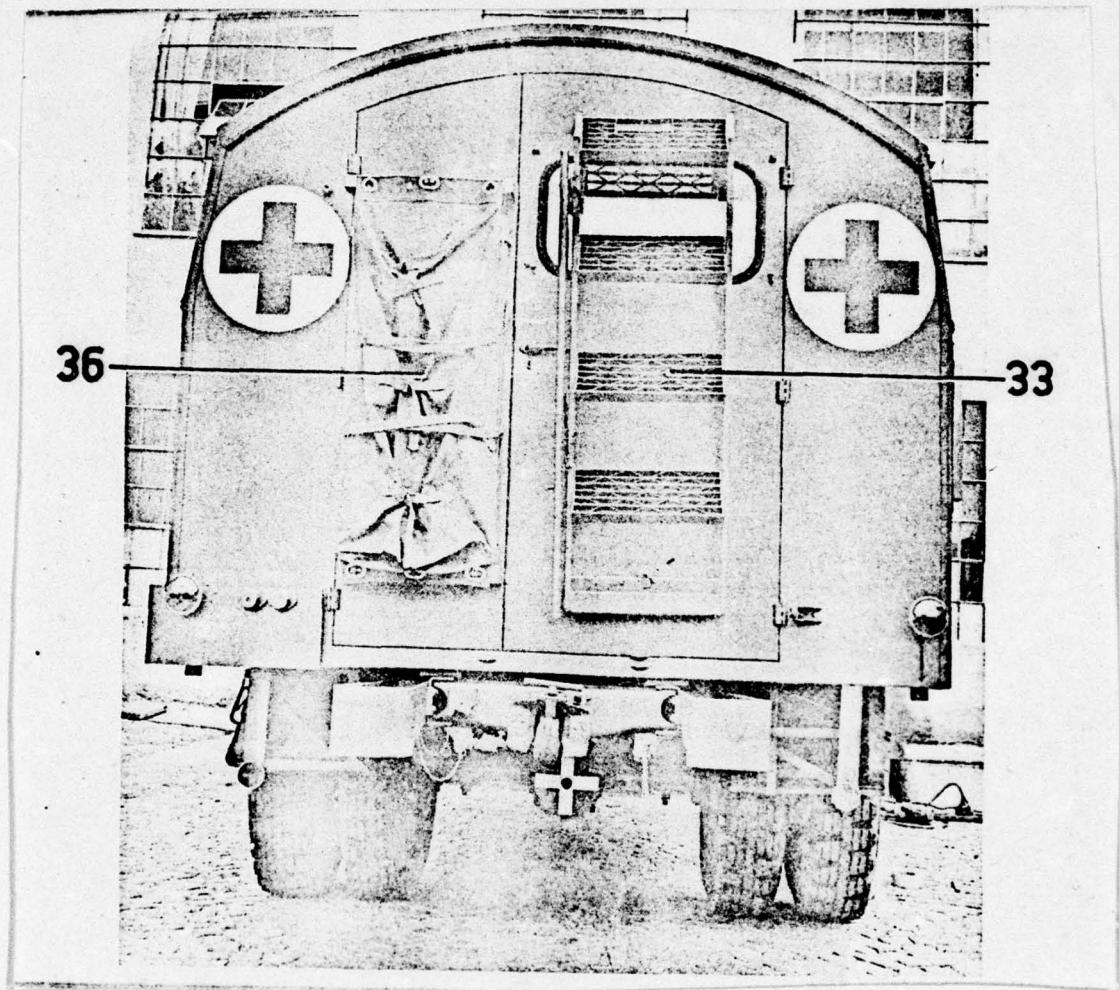


Figure 6. Vehicle rear wall with accessories and attachment parts.  
33--Stepladder with railing and retaining device; 36--Camouflage net bag.

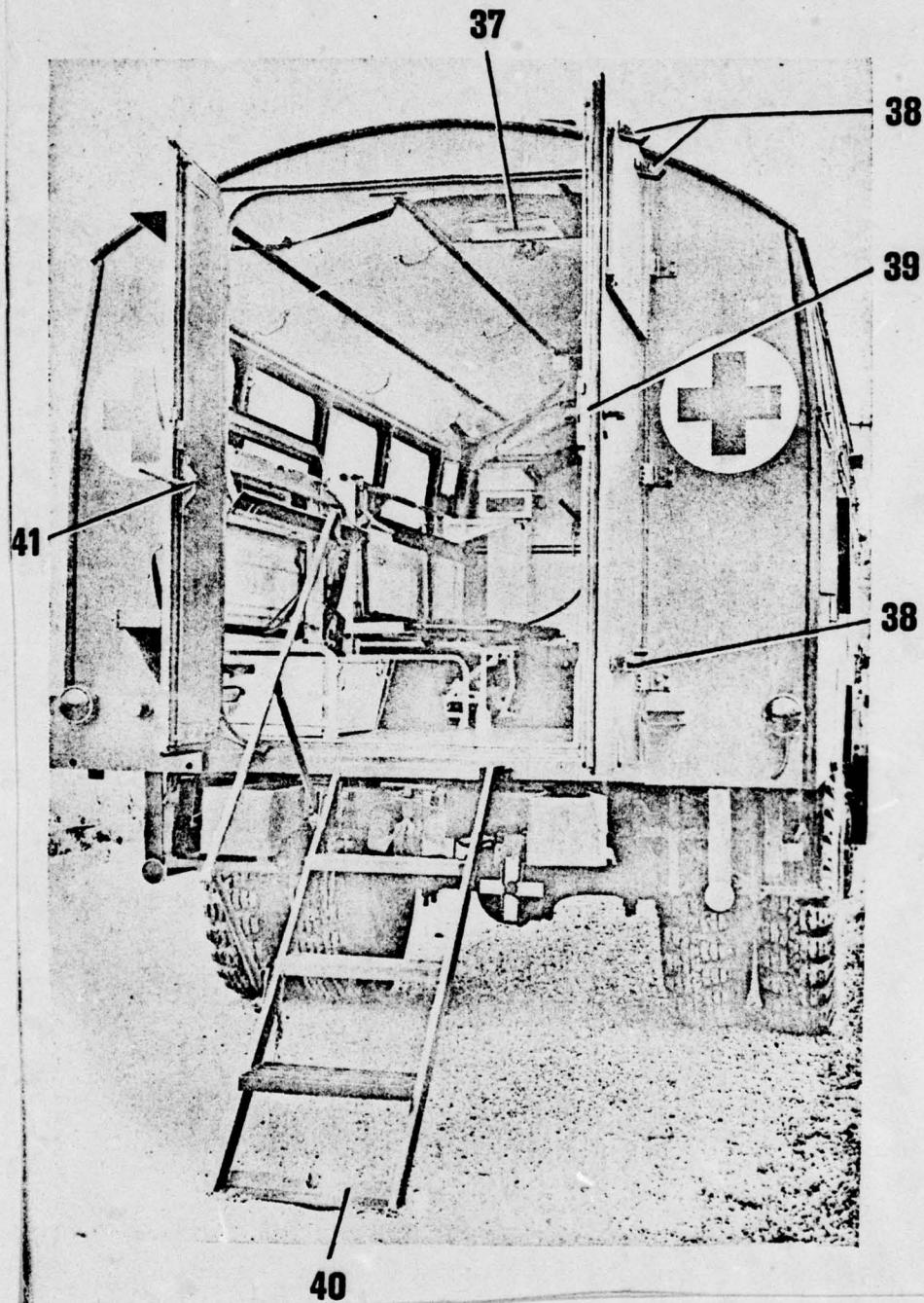


Figure 7. Vehicle rear wall, doors open and stepladder extended.  
37--Ventilation and air evacuation valves, seen from inside; 38--Holder for  
stepladder; 39--Door lock with rods and door handle; 40--Stepladder, attached;  
41--Bolt with full-length rod.

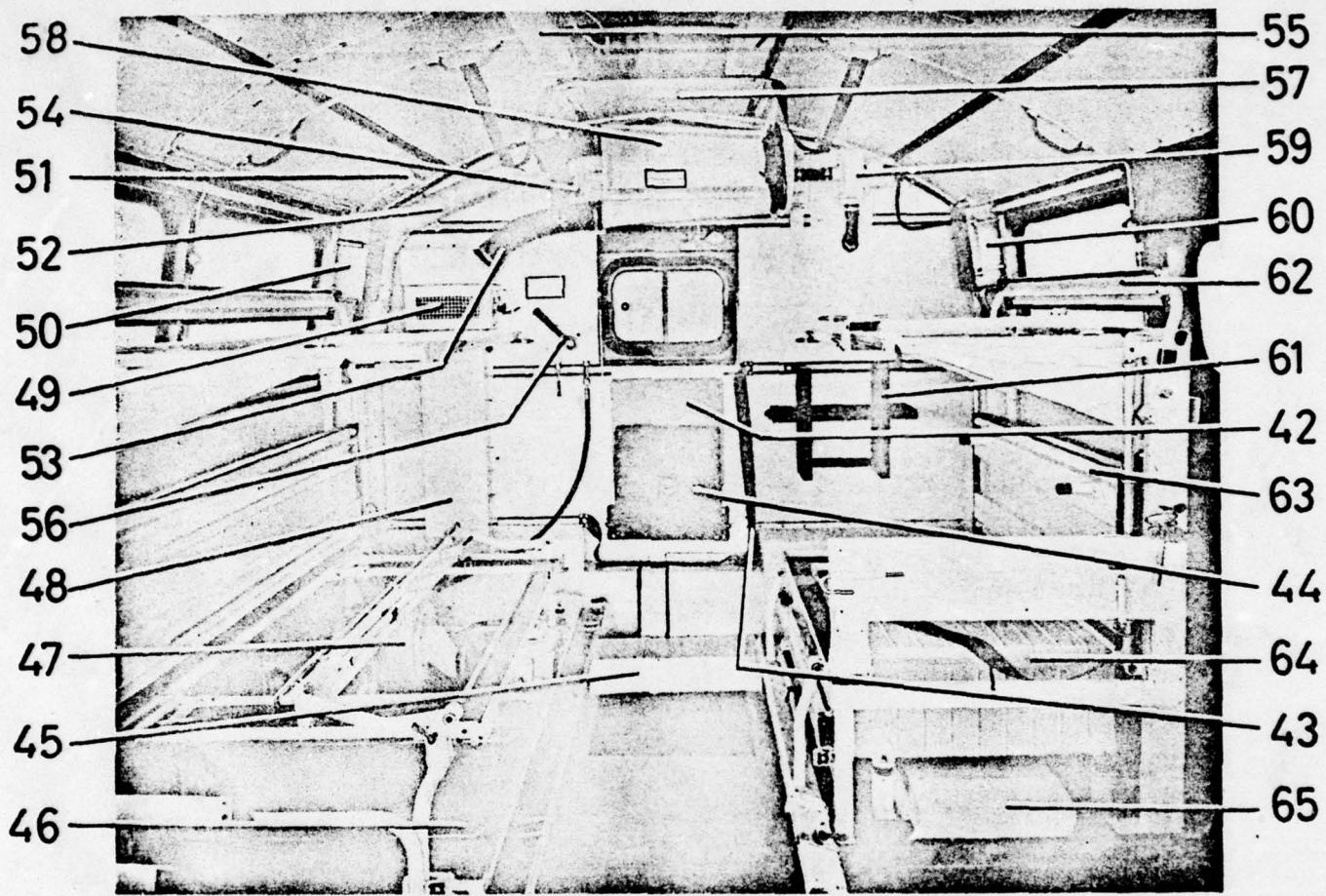


Figure 8. Body, inside, forward half.

42--Folding table (down); 43--Securing belts; 44--Folding seat; 45--Protective box for CBR system; 46--Retaining devices for field stretchers; 47--Main fan; 48--Hot-air duct; 49--Fresh-air circulation system; 50--Equipment for automatic conversion for two circuits, 24 v, 220 v; 51--Turn-on and turn-off switch for two operating lights; 52--Fresh-air duct; 53--Connection; 54--Compartment overpressure measurement instrument; 55--Operating lights; 56--Switching cock with teleflex remote control operation; 57--Inside light, white; 58--Coarse dust filter; 59--Exhaust fan; 60--Switchbox for CBR equipment; 61--Holder for water can; 62--Back rest, folded; 63--Bench, folded; 64--Filter box; 65--Outlet for hot air.

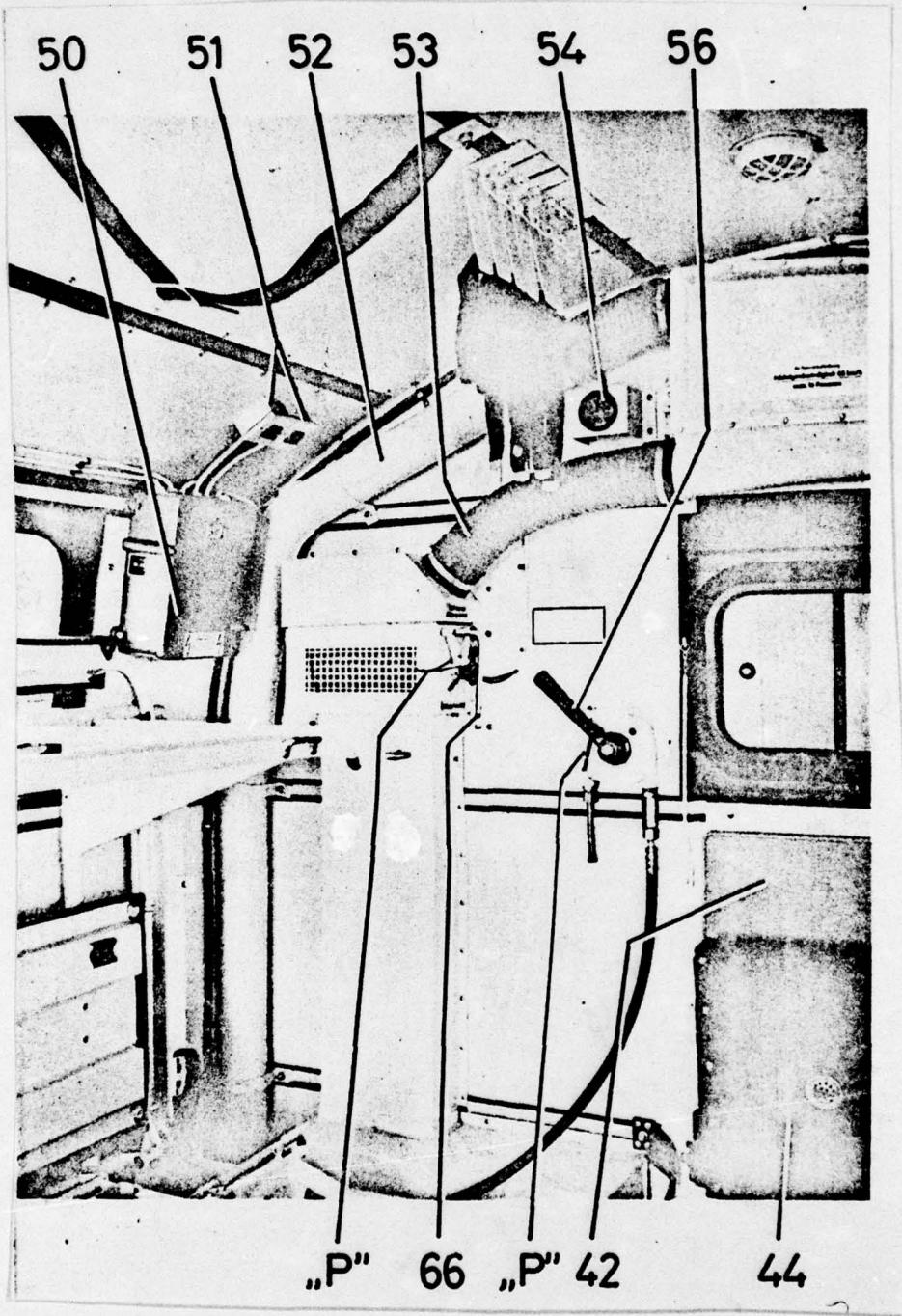


Figure 9. Front wall, left, vehicle interior.  
42--Folding table (up); 44--Folding seat; 50--Equipment for automatic switching for two circuits, 24 v, 220 v; 51--Turn-on and turn-off switch for two operating lights; 52--Fresh-air supply; 53--Connection; 54--Compartment over-pressure measurement instruments; 56--Switching cock with teleflex remote control operation; 66--Switching lever (heating); "P"--Lead-seal of switching levers 56 and 66.

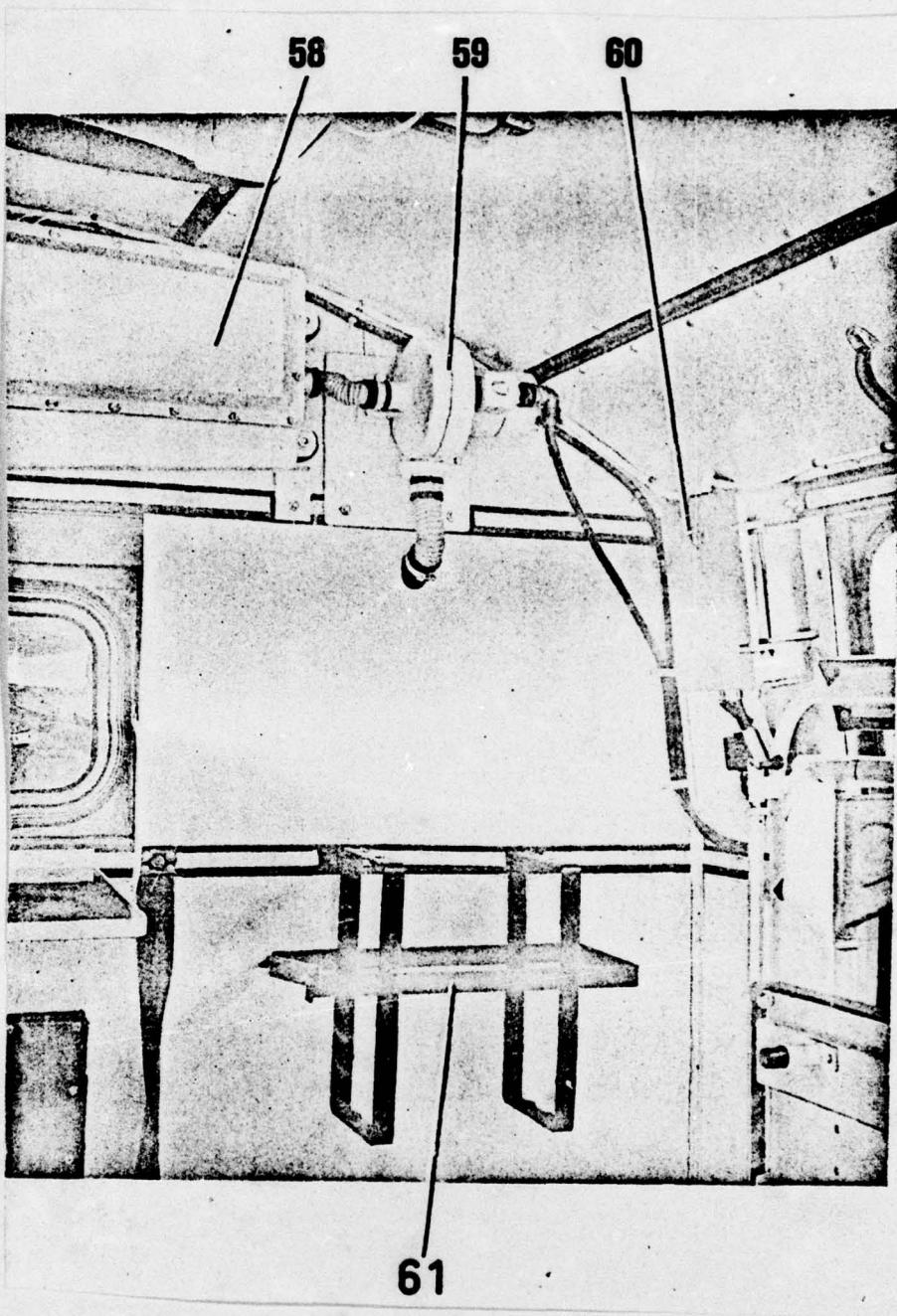


Figure 10. Front wall, right, vehicle interior.

58--Coarse dust filter; 59--Exhaust fan; 60--Switch box for CBR instruments;  
61--Holder for water can [Note: pages 26, 27 missing in photostat]

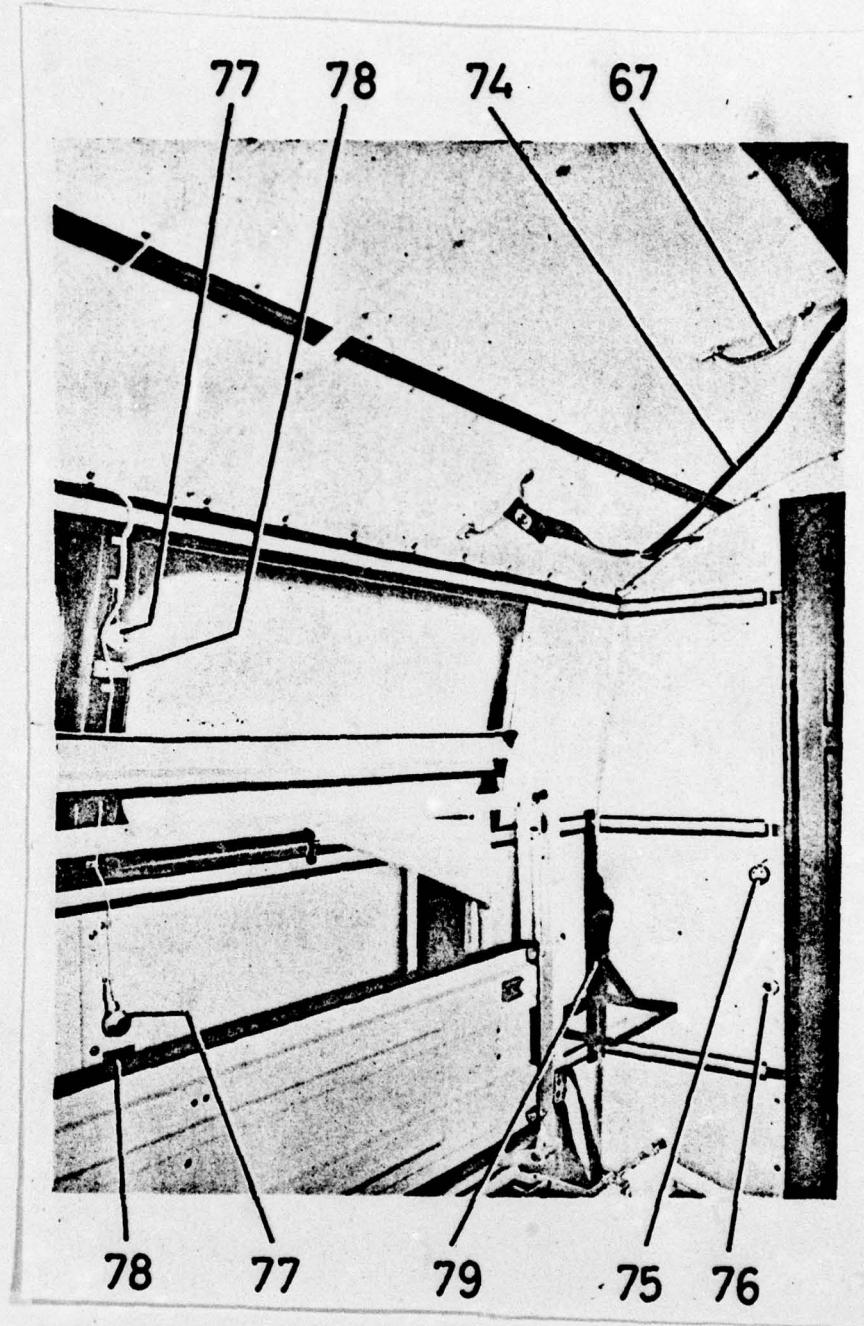
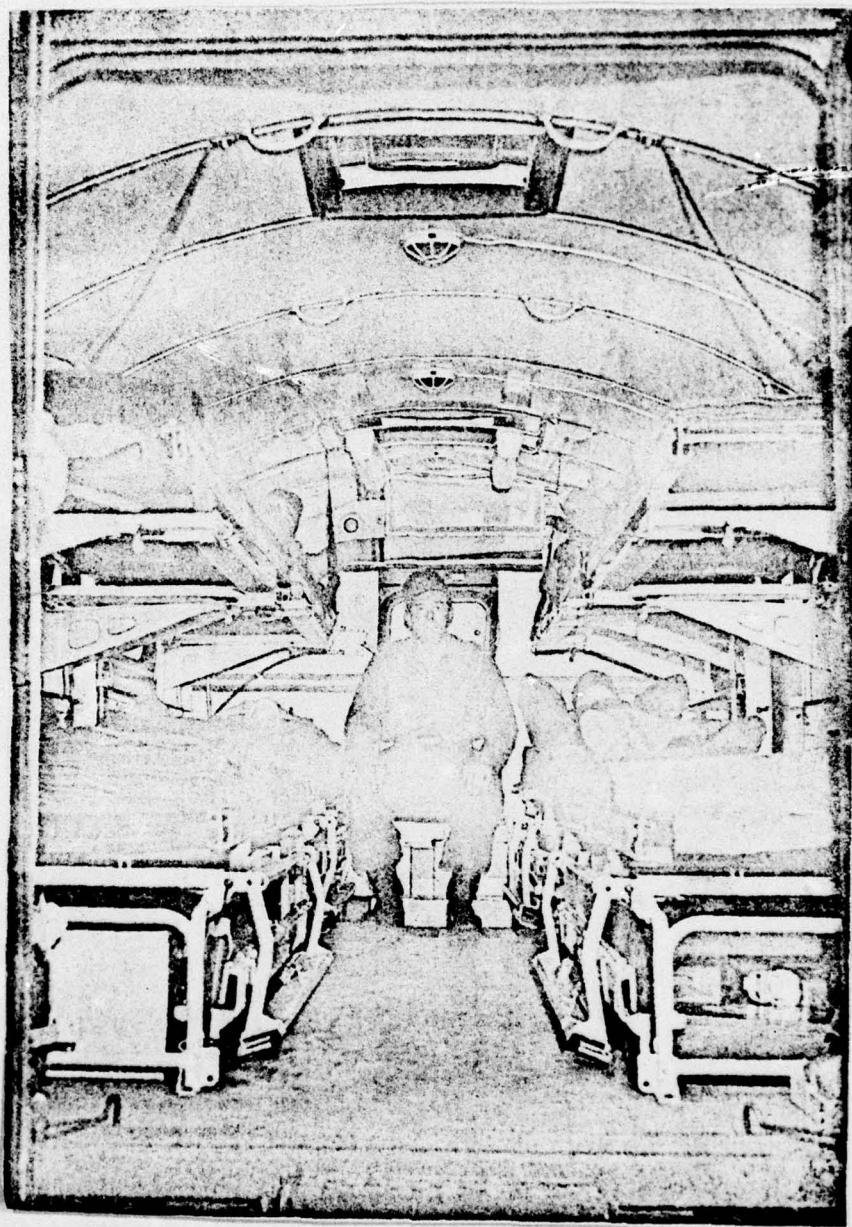
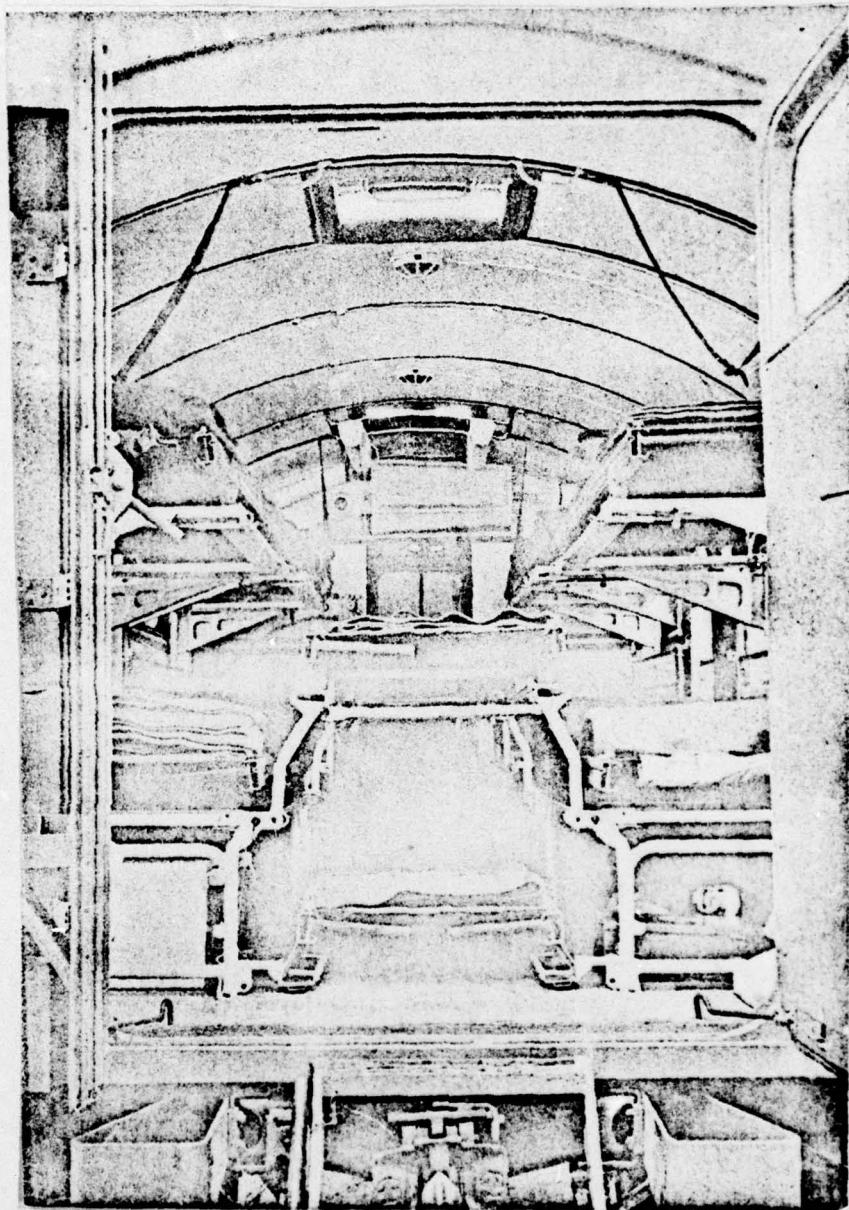


Figure 12. Body, interior, right rear.  
67--Handle; 74--Security belt; 75--Plug for flashlight or electric blanket;  
76--Door switch for inside light; 77--Emergency buzzer; 78--Emergency call  
plates; 79--Holder for light box.



The photo shows four stretcher cases and one attendant.



The photo shows accommodations for 12 stretcher cases.

## **Operating Instructions**

### **Electrical and Illumination**

Operating lights (parts photo No 5). These can be turned on only if the driver has the "OP light switch on "1." Every light can be turned on separately.

Overhead lights (white) (parts photo No 7). These can be turned on only when the main light switch forward on the dashboard is in the "normal" position (StVZO [street traffic licensing regulations] circuit. The ceiling lights are supplied with current in the StVZO circuit.

Ceiling lights (blue) (parts photo No 68). The ceiling lights are turned on not only in the StVZO circuit but also in the phantom circuit.

Automatic switching equipment (parts photo No 50). If the vehicle and all equipment in it are in operation with 24 v via the supplementary battery under the driver's seat, it is then possible to supply the electrical system via the plug (parts photo No 8) on the front wall, top, left, through a local power grid with 220 v AC by means of a 50-m long extension cable. The switch from 24 v DC to 220 v AC is accomplished automatically. (The same applies when switching from 220 v to 24 v.)

Socket (parts photo No 75). The body has 5 sockets for the connection of hand lamps, electric blankets, or other electrical equipment. Buzzer buttons (parts photo No 77). We also have 9 buzzer buttons which are connected with the buzzer in the driver's cab (parts photo No 84).

All-around identification light (parts No 6--blue light). To maintain the clearance dimensions, an all-around identification light must be folded down forward when the ambulance is loaded on a freight car.

CBR protective ventilation system. The CBR protective ventilation system is turned on by turning the switch which is to the right of the glove compartment (parts photo No 80). The green control lamp (parts photo No 81) which is on the dashboard, when lit, shows that the CBR protective ventilation system is on.

CBR protective ventilation system. References for the operation of the CBR protective ventilation system are contained in the attached operating instructions from Dräger/Piller.

On the sliding window in the front wall of the body compartment, the position of the switching cock (parts photo No 56) with teleflex remote-control operation for the operation of the lever is attached in a clearly visible manner.

Swing-fire heating unit. It is operated in accordance with the attached operating instructions from the firm of Eberspächer. Care must be taken to

make sure that the swing-fire used (parts photo No 16) and the turbo-heater are firmly drawn and placed against the outflow opening in accordance with the operating instructions. Special care must be taken to make sure that the heating unit is firmly toggle-secured and that a perfect sealing effect is thus achieved. (See technical specifications of Eberspächer Company, Photos 5 and 6). Besides, the connection between the swing-fire and the turbo-heater is to be established that perfect sealing will be assured.

Stretcher Support Frames. The stretcher bearing station is operated in accordance with the attached operating instructions from the Binz Company in Lorch.

Maintenance and Care. Hints as to maintenance and care are contained in the attached operating instructions from the firms of Dräger/Piller, Eberspächer and Binz.

Care must be taken that all movable parts on the body, such as door hinges, turnbuckles, locks, etc., are regularly lubricated.

Repair: repair work will be done according to the maintenance phases spelled out in the ETU [technical documentation].

Three control cards for conducting overpressure measurements are attached to the operating instructions. One of them must be inserted into the motor vehicle journal as the vehicle is placed in operation. Care must be taken to make sure that the control for overpressure measurements is conducted in accordance with the reprinted form on the control card. Overpressure control measurements must be conducted semiannually or after damage, respectively, repair of the body or the heating unit, respectively, the CBR protective ventilation system or parts thereof. If the overpressure drops below 10 mm Hg in spite of compliance with the instructions printed on the control card, then the body manufacturer is to be notified, indicating the body number and the test results.

After control measurement, the lead seals, which have been removed, must again be replaced on levers 56 and 66.

**CAUTION:**

The following points must be observed before making the overpressure measurements in the 5-t jumbo ambulance with built-in protective ventilation system.

1. Additional battery under the driver's seat must be checked for perfect condition (fully charged); if necessary, exchange battery.

2. Check to see whether the turbo-heater has been perfectly inserted and is properly pressed against the outflow opening with the toggle screw. No air must be able to escape!

3. Close and lock doors. The key plates, attached to the keyholes, must be closed off with a lid.

4. Closing flap for CBR filter on right-hand sidewall, forward, must be opened and tested to make sure that all screws for the individual filter inserts are properly tight.

5. Sliding window on front wall and ventilation flaps in roof must be closed.

6. Fresh-air circulation flap must be on "heating" circulation air. The flap must be pressed on and must be fixed in position with the toggle screw.

7. Start vehicle engine and let it run. The red charge control light must no longer light up on the dashboard.

8. Now turn on CBR system and after about one minute read off the overpressure and enter the figure on the control card. The overpressure is indicated in mm Hg.

9. Overpressures must be measured without and with the CBR filter turned (standard ventilation--protective ventilation).

Landau, October 1973.

GEBR. EICHER  
Traktoren- und Landmaschinen-Werke GmbH  
838 Landau/Isar  
Telephone 7034

**Control Card for Overpressure Measurements**

**On 5-t gl Jumbo Ambulance with CBR Protective Ventilation**

**Chassis No.....Body No. 25858/.....**

**Date      Overpressure in mm Hg**

**With      And      Without**

**Checked by**

**CBR filter turned on**

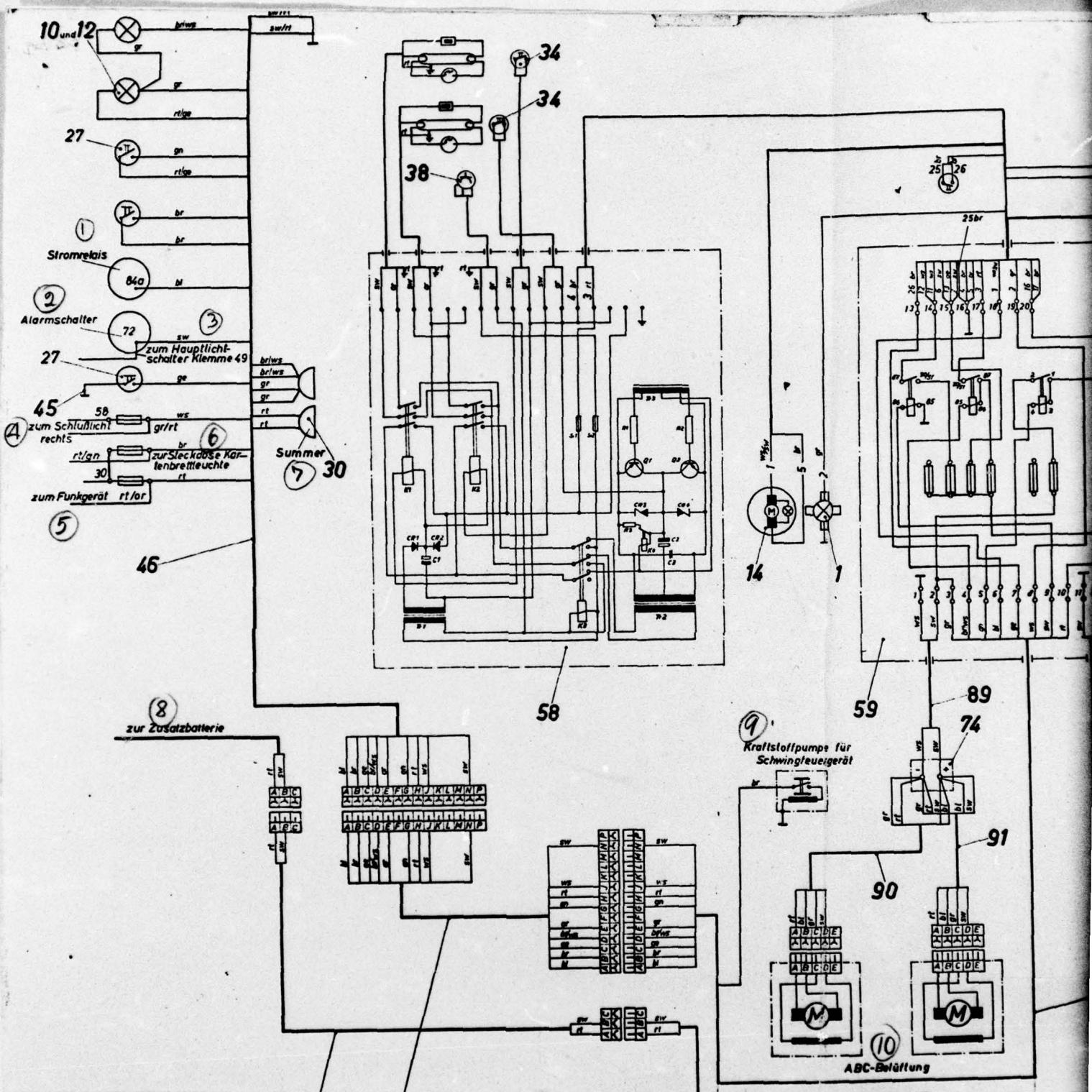
Circuit Diagram (25858-9200.00) of Electrical System

Item No.

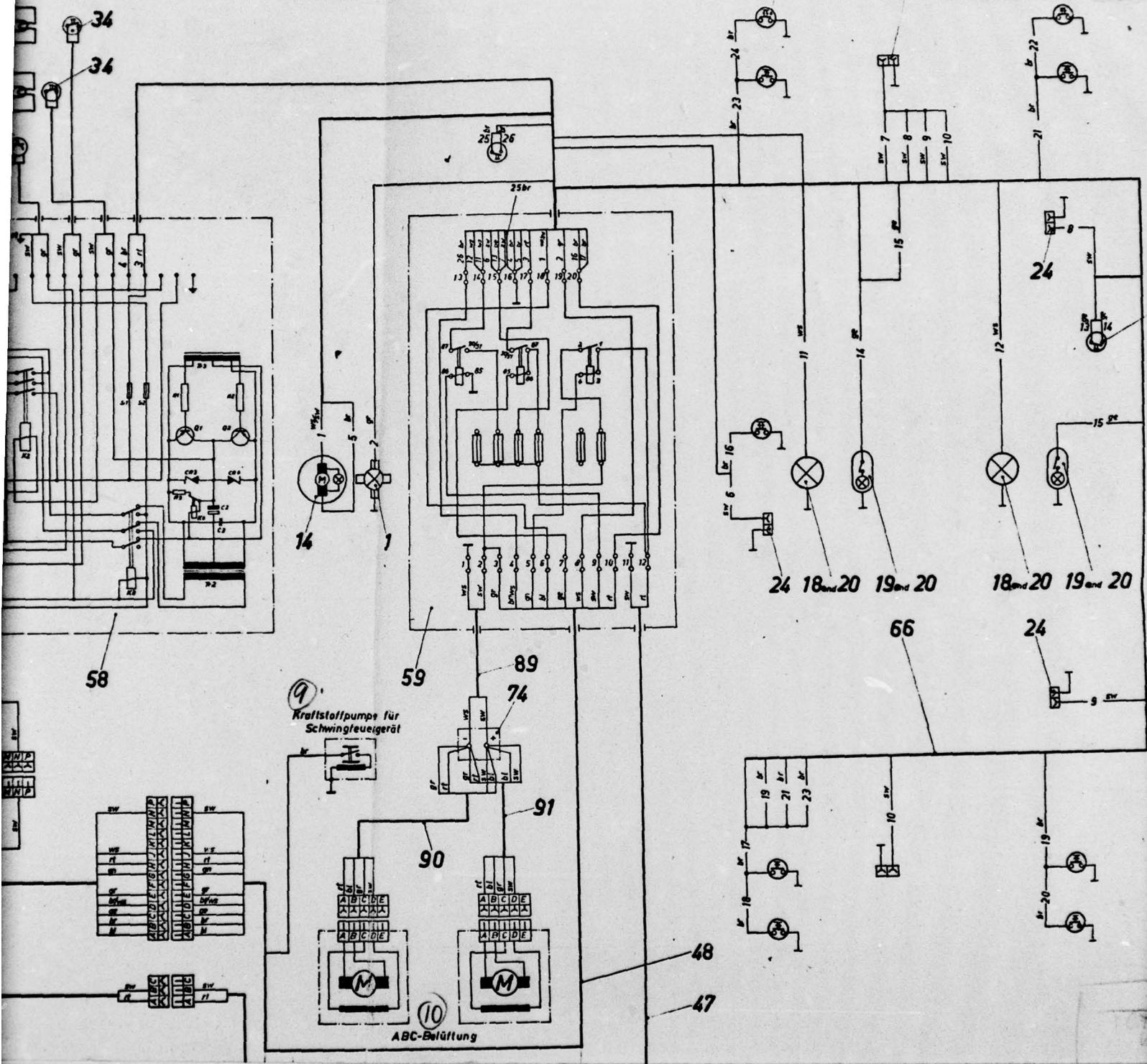
- 10 One green indication light
- 12 One light bulb
- 14 One all-around identification flasher
- 18 Two white ceiling lights
- 19 Two blue ceiling lights
- 20 Four light bulbs
- 24 Five sockets for hand lamps
- 25 Nine emergency buzzers
- 26 One tumbler switch
- 27 Two turn-on and turn-off switches
- 30 One emergency buzzer
- 34 Two damp-proof turn-off switches
- 38 One flange plug with closing cap
- 45 One [power] line
- 46 One cable strand
- 47 One line
- 48 One line
- 49 One connecting line
- 50 One connecting line
- 58 One instrument for the automatic switching of circuits
- 59 One switch box
- 66 One cable strand, body, inside

**Item No.**

74	One line connector, radio
89	One line
90	One line
91	One line



Legend: 1--Power relay; 2--Alarm switch; 3--To main light switch, terminal 49; 4--To taillight, right; 5--To radio; 6--To socket, map board light; 7--Buzzer; 8--To supplementary battery; 9--Fuel pump for swing-fire unit; 10--CBR ventilation.



switch; 3--To main light switch, terminal 49;  
 6--To socket, map board light; 7--Buzzer;  
 Fuel pump for swing-fire unit; 10--CBR venti-

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